

Dedicated to the Conservation of Virginia's Wildlife and Related Natural Resources and to the Betterment of Outdoor Recreation in Virginia

Published by Virginia commission of game and inland fisheries, Richmond, Virginia 23213



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PUBLICATION OFFICE: Commission of Game and Inland Fisheries, 7 N. Second St., Richmond, Virginia James F. McInteer, Jr. Editor ANN E. PILCHER Editorial Assistant Leon G. Kesteloo Photographer HARRY L. GILLAM Circulation

JUNE Volume XXVI/No. 6

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COVER: In the orchestration of swampland sounds in summertime the American bullfrog plays bass with his vibrant, sonorous notes best syllablized as jug-o'-rum jug-o'-rum, jug-o'-rum. Our largest native frog. Rana catesbeiana, originally inhabited wetlands of eastern North America, but has been introduced throughout western United States and into other parts of the world. Our artist: Duane Raver.

SUBSCRIPTIONS: One year, \$1.50; three years, \$3.50. Give check or money order, made payable to the Treasurer of Virginia, to local game commission employee or send to Commission of Game and Inland Fisheries, P. O. Box 1642, Richmond, Virginia 23213.

VIRGINIA WILDLIFE is published monthly at Richmond, Virginia, by the Commission of Game and Inland Fisheries, 7 North Second Street. All magazine subscriptions, change of address notices, and inquiries should be sent to Box 1642, Richmond, Va. 23213. The editorial office gratefully receives for publication news items, articles, photographs, and sketches of good quality which deal with Virginia's soils, water, forests, and wildlife. The Commission assumes no responsibility for unsolicited manuscripts and illustrative material. Credit is given on material published. Permission to reprint text material is granted provided credit is given the Virginia Commission of Game and Inland Fisheries and VIRGINIA WILDLIFE. Clearances must be made with photographers or artists to reproduce illustrations.

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A Matter of Right

LAST month's hearings on U. S. Senate bill S-1592, along with some related events, warn clearly that noble American traditions and basic inalienable rights are never entirely immune to being tramped upon by democracy's tyrannical heels.

The proposal this time would abolish mail order sales, and restrict even over-the-counter purchases, of shotguns and rifles. But that is only the beginning, for S-1592 would hand over to the Secretary of the Treasury full authority without restraint to prescribe further antifirearm regulations.

The admitted purpose of the advocates of this legislation is not to attempt control of sporting firearm ownership from the federal level, but rather to interfere with legitimate commerce in sporting arms in such a way as to establish a federal framework of regulations which will encourage state and local governments to restrict the right of ownership. And at least one major city has recently jumped the gun and provided an excellent preview of things to come. Since April 15 the mere possession of a shotgun or rifle has been illegal in Philadelphia, unless the owner's name, address, fingerprints and photograph, along with the weapon's serial number, have been presented to the police; and, of course, a fee is imposed for such registration. Unregistered weapons may be confiscated, and the alleged owners fined.

Truly there exists a foul conspiracy to disarm the law-abiding American public. The notion that the public may not be trusted to possess firearms except under government surveillance is deeply rooted in rotten foreign ideologies against which we have waged deadly hot and cold wars of survival for half a century. Large segments of the press have been rallied to the unworthy cause; and strange it is that those so sensitive to every imagined restraint upon "freedom of the press" should find it in their hearts to espouse the infringement of an equally inalienable right.

Is it truly in the public interest that the basic freedom to purchase and possess an article of personal property for lawful purposes be further abridged, and that one of our finest traditions—that of private ownership and use of firearms—be dishonored? Is the owner of a shotgun or target rifle to be treated arbitrarily by police as a criminal suspect—fingerprinted and photographed—a murder just looking for a place to happen? Merely to own a firearm legally in Philadelphia today, for whatever purpose, is to have a police record! The honest resident sportsman, the visiting hunter or target shooter, the traveller just passing through, take heed, for henceforth even the transportation of an unregistered firearm through the City of Brotherly Love is in violation of the law!

And all this is needless, except in the eyes of those who for their own reasons do not trust the *honest* and *law-abiding* American to possess and bear arms, for firearms neither make criminals nor cause nor encourage crime. Although guns may be involved in some crimes of violence, they are in no way essential to such acts. A club, a knife, a tiny vial, a length of rope or a weighted sock serve just as well. Only the loyal, law-abiding citizenry, not humanity's outlaw fringe, can be effectively disarmed by restrictive laws.

In the face of the spreading blight of this subversive doctrine that mistrusts an armed citizenry, there are important battles of the ballot boxes to be fought at national, state and local levels if we would retain our cherished right to possess and bear firearms—not as a privilege to be granted or withheld—not as fingerprinted and photographed suspects requiring surveillance—but proudly, as loyal, responsible and trustworthy citizens, which the overwhelming majority of hunters and target shooters really are.—J. F. Mc.

Biggest Groundhog?

I have been hunting groundhogs over 25 years, I have seen some that I thought were large, but when I took them in to weigh they would only go around 13 pounds. This one in the picture weighed 15½ pounds and measured 11½ inches across the stomach and 28 inches from end of nose to tip of tail. This groundhog did not appear to be old, as his coat was dark gray and he did not have any scars or worn places on his coat. It was a male and I killed it in Clarke County, Virginia, with a 222 reload, loaded by a good friend of mine, Trooper D. 1. Peer of New Market.



I have checked with a number of groundhog hunters and they have advised 13½ pounds is the largest groundhog they have seen. From my experience, I don't believe they get any larger than this one.

Robert E. Pope Front Royal

Skinning the "Cats"

1 NOTICE in your Virginia Wildlife, Volume XXV, No. 8, you stress the pleasure of catching what I know as "blue cats." Recently at Claytor Lake I served breakfast Sunday morning of bluegill, crappie, bass and fillet of blue cat. One of the guests stated she could not eat catfish, so I asked her to try a piece of "pike," which incidentally was the catfish, and she voted that this was the best of all that was served that morning!

My particular reason in writing you is to determine whether or not your readers know the best way to clean catfish. For years 1 used wrenches, screwdrivers and every tool 1 could get hold of until I was advised by a friend of mine to simply dip the cat in steaming water for about 30 seconds and then take a simple fish scaler and rake off the skin, fillet the cat, and throw the carcass away. Broiled or fried, this makes a delicious dish.

I enjoy reading the Wildlife magazine and commend you highly on the interesting articles in each issue.

J. T. Engleby, Jr. Roanoke

Trail Blazing

By JANET SHAFFER Lynchburg

HE American Indians tramped the first nature trails on this continent many hundreds of years ago. These were later used by the frontiersmen, usually as the shortest route between two points. Nature trails have become increasingly important today in the teaching of conservation and nature appreciation. They are a significant addition to forest areas which have been, and will be, set aside for outdoor recreation.

Each year it is obvious that there is a gradual disappearance of more and more countryland in favor of suburban developments. State and national parks and other wilderness areas offer some of the last strongholds against an encroaching civilization, but there should be other ways and means to preserve smaller corners of nature on a more local level. This has been, and ought to be, the American way.

One outstanding example of what can be achieved locally is the 325-acre Izaak Walton Park in Amherst County, planned, financed and established by the Lynchburg Chapter of the Izaak Walton League of America. This conservation organization has for a number of years been the largest League chapter in the United States, with an approximate annual roll of 2,000 members.

Once the idea of a park became the primary project of the Chapter, a steering committee obtained recommendations and information from various land-use agencies. These included the Soil Conservation Service, The Virginia Division of Forestry, the Virginia Commission of Game and Inland Fisheries, and others. League work parties then proceeded to develop the area as an Izaak Walton focal point to provide maximum recreation and, at the same time, demonstrate good conservation practices.

Two six-acre ponds (one for swimming and the other for fishing), skeet and rifle ranges, archery courses, a Boy Scout camping area, clubhouse, wading pool, and extensive picnic areas are contained within its perimeter. Over 40,000 pine trees have been planted, wildlife borders developed and other conservation demonstration projects completed. The park has contributed greatly to the recreational opportunities of members and their guests. Nor is that all.

The latest and most significant League undertaking has been the Tomahawk Conservation Nature Trail, so named for the Indian stone ax found during the initial clearing. It encompasses nine-tenths of a mile, winding through park woodlands and around the lakes. This outdoor laboratory has been opened to the general public and has become popular with local educators and various agencies for nature study and natural resource conservation "on location." Interested groups and individuals are invited to take the self-guided tour (with illustrated booklets) at their leisure and are encouraged to stop, look and listen at each of the thirty-five



highlights en route, where important aspects of nature are emphasized.

At six different locations, rustic display panels have been set up showing the common birds, animals and fishes of the surrounding habitat, along with conservation lessons on managing soil, woods, water and wildlife. At other points, instruction is given in plant and tree identifications, wildlife food plantings, examples of soil erosion and man-devised firebreaks. Bird houses made by Boy Scouts add other human touches along the trail, and a great Smokey the Bear figure looms up in the woods as a reminder to hikers of ever-present fire danger.

Throughout the beautiful terrain where the pathway leads, nature offers interesting specimens of plant and tree life for the observing eye. It may be a rotted locust log with a story to tell of its important role in the life cycle, or an unusual tree, misshapen by an accident of environment. Or it may be an unusual growth of mosses, lichens or ferns to be studied and remembered as important events in natural history.

(Continued on page 22)



GROWING AND SELLING TIMBER

ON STATE WILDLIFE MANAGEMENT AREAS

By J. W. ENGLE, JR.

Game Commission Forester

PURCHASE of Haven's Refuge (6.400 acres) in Roanoke County during 1930 was probably the Commission of Game and Inland Fisheries' first land acquisition. Additional public hunting land acquisition. starting in 1957 with the Gathright Management Area (18.392 acres), has resulted in a total Game Commission ownership of 135.406 acres in 19 tracts.

Although the Commission endorses completely the principle of "multiple land use," its primary objective in acquiring and managing land is maximum wildlife production for the use and enjoyment of the hunting and fishing public. All land management practices in use on these areas are in keeping with this objective. Only hunting and fishing license money and Pittman-Robertson funds (state share in 11% federal excise tax on arms and ammunition) go into the purchase of these acreages. The Commission, therefore, is interested in encouraging use of its lands by properly licensed sportsmen, under minimum regulations, rules, policies, and laws. Restrictions upon recreational use of these particular outdoor areas are only those demanded by a recognition of the fact that there is a limit to the amount of "human browsing" and disturbance which wildlife can tolerate.

Wildlife is a product of the land, and as such is entirely dependent on the vegetation, in one way or another, for its food and cover. In managing large acreages, such as our 135,000 acres, methods and techniques must be used that are least expensive on a per-acre basis.

Nineteen thousand acres (seven tracts) are primarily waterfowl lands. Management on these is by use of water level controls, herbicides, and agriculture-type plantings for the maximum pounds per acre of food.

In addition to the waterfowl lands there are 116,000 acres of uplands—primarily deer, bear, grouse, turkey, squirrel and raccoon habitat. Most of these lands are found within or on the slopes of our mountains.

An estimated 1,700 acres of openings and fields within this 116,000 acres will be kept in grasses, grains and similar vegetation. Turkey and deer use these fields, but the chief beneficiaries are rabbits, quail and doves.

There is left approximately 114,300 acres of true forest game habitat. All of the 114,000 acres is not prime timberland. For example, of the Goshen Management Area's 15,954 acres. 40% is noncommercial timberland. The Gathright Management Area has 70% of its area classified as noncommercial. The George Washington National Forest, by way of contrast, classes 27% of its lands as noncommercial. Yet, the Commission's overall 45-55% noncommercial timber does provide habitat for forest game, and space in which many sportsmen can enjoy their favorite outdoor recreation.

As time progresses, and for trees time is measured in centuries or half centuries, sound forestry practices will change much of the 45-55% noncommercial timber to commercial. Many of our lands are in the same status now

that the National Forests were in during the very early 1930s. Forest management plans have been prepared for many of the wildlife management areas. All areas will have such plans in time.

A basic factor in determining cutting objectives is annual timber growth rate per acre per year. Forest Survey Release #54 lists oak-hickory type in the mountains as growing 69 board feet per acre per year and 0.37 cords of pulpwood per acre per year. Sample inventories on Commissionowned lands in the northwest portion of the state show growth rates of 71 board feet and 0.40 cords per acre per year. For comparison, loblolly pine at Hog Island has been estimated to be growing at 500 board feet per acre per year. There is a wide contrast of forest conditions in the Old Dominion.



Since most of our management areas are now understocked in timber, our timber cutting objectives have been set at 40% of the annual sawtimber growth and 60% of pulpwood growth. This is based on the objective of accumulating more desirable growing stock during the next 20-40 years.

The objective is not primarily monetary return from the lands for its own sake, however; rather, it is to produce and retain the best habitat for wildlife at a minimum cost per acre. And it is this concept that timber cutting can and must serve a larger purpose, rather than being an end in (Continued on next page)

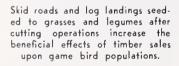
JUNE, 1965



itself, that adds complications to the planning and gives overriding importance to the matter of how the timber harvest is to be accomplished. If mature mast-producing trees are cut heavily, the new growth which springs up in their place will provide a sudden increase in deer browse. but there will be a shortage of nuts and acorns for squirrels. bears and turkeys for many years to come. If marketable stands of non-mast bearing species are cleared, browse will become abundant at first, but within 20 years the new even-aged stands will have grown out of reach of the deer and it will take another 40 to 60 years before the stands will reach marketable size again. In contrast to the techniques often used in commercial timber production, the maintenance of uneven-aged stands is a prime objective of cutting in the management of forest land for optimum wildlife production. If cuttings are selective and widely dispersed, there will be more openings resulting from log landings and skid roads, and such openings are of great benefit to such game species as grouse and turkeys. But timber cutting that is too light and too widely dispersed is inefficient and economically unprofitable. In improving the quality of standing timber the removal of over-mature, damaged, and diseased trees makes room for more vigorous. fast-growing stock, but such improvements also remove the den trees needed by squirrels. raccoons, bears, and other species.

Based on experience, research, and all information obtainable, a compromise to benefit wildlife most and hurt the least over the long haul is adopted. Thus, mast trees can be kept, browse increased, hunter access developed, cover increased, employment provided local people, income derived, and 25% of the gross sales returned to the counties in lieu of taxes.

The cuttings and sales in 1961 were a start: 776 thousand board feet with an income of \$21,798,90. In 1965 it is ex-







Logging roads, paid for by timber sales, provide better hunter access to remote parts of wildlife management areas.

Commission photos by Kesteloo

pected to be 1.3 million board feet with an income of \$40,000.00. A leveling off should be reached by 1967 of approximately 2.3 million board feet and a yearly income of \$60,000.00.

To be specific, let us examine one management area now in production both of timber and wildlife. The Goshen Area is divided into 8 cutting compartments. A cutting schedule extending over a ten-year period has been prepared. Each year sales will be made in 4 compartments, and seldom will a compartment be cut for more than 4 out of the next 10 years. While volumes of timber to be cut are set—224 thousand board feet of sawtimber and 2,240 cords of pulpwood per year—the acres to be cut over are more important; in this case, 460 acres per year. Twenty-five percent of the cut areas will be replanted to white pines. Conifers are scarce on this management area, and increased cover should benefit grouse and turkeys. Log landings and roads will be seeded to grasses and legumes. No main-

tenance need be practiced on these plantings which, whether the benefits last one year or five, will be much less expensive than maintenance of agricultural-type openings. Each year new openings will be created.

Examination of deer from the Goshen Area have shown for several years the heaviest yearling bucks west of the Blue Ridge. Goshen may not have the most deer per square mile, but it does have a quality herd. Spring gobbler kills of one per thousand acres have shown this poor, sandy, hardwood pulp area can produce good turkey hunting. A profitable, sustained yield timber management plan has been devised to perpetuate and improve these favorable conditions.

The objective of the Commission's game management program on its forest lands is to employ sound, standard, togical forestry practices with the *primary purpose* of improving wildlife habitat and providing good hunting in all the years to come.



JUNE, 1965



Flying Squirrel Glaucomys volans

records in Virginia: "Squirrels as bigge as Rabbits, and other flying Squirrels, called Assepanick. (Virginian Indian name) which spreading out the legges and skins, seeme to flie thirtie or fortie yards at a time.'

These merry night-frolickers appear to be bubbling over with fun, jumping, bounding, capering, running with evervarying movement and astonishing energy. Before leaping into space, the flying squirrel seemingly appraises the distance of its intended glide by swaying its head and body several times from side to side. With whiskers stretched forward possibly as an antenna to pick up vibrations, it springs vigorously into space. With legs extended out to the fullest, unfolding a loose elastic membrane stretched tight like a kite, it glides downward at an angle of 40 to 50 degrees, and as far a distance as 150 feet. The tail and legs are used as rudders enabling it to twist and turn to steer in any direction, landing like the light little puff of fur it is on the trunk of a tree.

Its maximum weight is less than three ounces, and from tip of nose to tip of the tail usually measures less than eleven inches. Its thick fur is velvety soft, olive brown or gray brown in color above, and creamy white beneath. On the sides, darker tones grade into almost a pure black border along the edge of the flying membrane. The flyer's stubby muzzle and huge black, liquid eyes give it a remarkably innocent expression. At night, in the glow of a flshlight, the eyes shine ruby red.

After "living it up" at night these social nocturnal mammals sleep all day in a nest high in a tree, an old deserted woodpecker hole, or a natural cavity in some old tree trunk close to water. Shredded bark generally forms the lining for the den but occasionally other soft material such as lichens, moss, feathers, or leaves may be added. Flying squirrels may have extra homes of leaves which they use for refuge.

These merry-makers are full of tricks and active all year. They breed in February to March and in May to July. One

to six but usually three to four young are born in March to early April and in July to September. At birth the babies weigh 1/9 to 1/5 ounce; are naked, pink and have their eyes and ears closed. They have a full eoat of fur at three weeks and nurse for five weeks. The mother hardly ever leaves the babies, except for a moment to get a bite to eat. If the mother needs to move her babies to another location she carries them by their belly skin while they curl their feet and tail around her neek. The young stay with the mother until the next litter arrives. The father keeps well out of the way when the female is busy with the babies, possibly to avoid her saucy scold of sharp squeaks and squeaks.

Most of the flying squirrel's menu is vegetable matter made up of nuts, seeds, mushrooms, and berries, with an occasional nibble of tender twigs. Food is seldom a problem.

Assapan, the Flyer, will rarely bite or scratch; and quickly ceases to struggle if assured that you mean to do-him no grievous harm. Loud noises and much confusion can alarm them and they do sometimes die of fright.

"The meek shall inherit the earth" does not hold true for flying squirrels, the gentlest of all rodents, for they have many enemies—owls, weasels, bobeats and hawks, to name only a few. The little rogues are so curious they investigate traps set for other animals and quite frequently get caught.

WHAT'S NEW ON THE SHORE

By DON CARPENTER Annapolis, Maryland

HERE is a new look coming to the outer islands of Virginia's Eastern Shore. It started early in June 1964 when Accomac, Virginia, realtor Johna H. Davis established the Cedar Island Sports Club about three miles offshore, with 5 miles of private beach for fishing and 2.000 acres of marsh for hunting.

Claude Rogers. Bob Hutchinson. Thomas Jefferson Smith III, and this writer attended the birth of the Cedar Island Club, which was formerly a U.S. Coast Guard station, was declared surplus, and bought at auction by Johna Davis, who spent a lot refurnishing and preparing to accommodate sportsmen nine months a year.

This sports paradise is one of a chain of 12 outer islands along the Atlantic coast that protect the Virginia Eastern "Sho" from the wrath of the ocean, and provide a protected waterway for small craft going up and down the coast.

Fish and bird life abound in this countless maze of marshy waterways and miles of fine ocean beaches, and there are no bright lights such as found at Coney Island or other congested ocean beach recreation centers. All is peace and quiet—except for the roar of the ocean and the calls of the birds.

Fishing at Cedar Island starts in April with the shad, flounder, rockfish, and trout runs. Casting shad-rigs with light tackle at the two inlets can produce 100 or more gamesters per rod, per day.

Flounder or fluke move inside from the ocean as soon as the "silversides" start to school in the inlets and waterways. Then it's a lead-pipe cinch to take 10 to 75 nice flatties a day, drift-fishing from a small boat using live bait on a spoon or spinner rig. Local bait dealers stock frozen silversides at 50 cents a half pint.

Sometimes big red drum or channel bass arrive off these ocean beaches as early as April, but May is the hot month for red and black drum surf casting, plus bluefish, flounder. rock, and fast shad casting.

June angling produces a wide variety of salt water fish at Cedar Island, including the kingfish or "roundheads" which stay until late fall. Fishing generally continues good through the summer months until late October, with channel bass at their best along the beaches during October and May.

Cedar Island Sports Club also offers the least crowded and best marsh hen hunting I have found on the Atlantic Coast. On one trip last fall I only saw one other boat, containing a guide and two hunters in three days of hunting on thousands of acres of virgin marsh. I saw birds by the hundreds every day, and bagged my limit of 15.

The club also has dozens of duck blinds, and no problem of crowded hunting for the large black ducks, pintail, teal and brant. Even a few Canada geese were bagged by the guests last fall. Club rates for blind, decoys, guide and living are very low.

It is very likely that similar clubs will soon spring up along Virginia's outer islands, to satisfy the growing public demand for uncrowded sport facilities.

Johna Davis, who manages the Cedar Island Club, is a chef at heart, and prides himself on the good food and many exotic dishes he prepared for his guests, who, like myself, usually add about 10 pounds a week to our weight. He has a "package price" for his guests, and this includes room, board, setups, beach buggies (2) for anglers and hunters, also the three-mile trip by boat to and from the club. He also has boats for his guest's fishing, but charges extra to rent an outboard motor.

My wife Peg loves to beachcomb the unspoiled five-mile stretch of sand at Cedar Island, where she finds all kinds of beautiful shells and interesting bits of drift.

We both love to watch the teeming bird life around the club, where terns, gulls, shearwaters, snipe, curlew, heron, sora, and other waterfowl abound.

The clean, comfortable clubhouse is screened throughout.

(Continued on page 21)





Left: Peg Carpenter displays a string of Eastern Shore flounder. Right: Bob Hutchinson, Portsmouth outdoor writer, lands a big one on light tackle.

Bird Watching, Anyone?

By JEAN SAPP Martinsville

YEAR ago in December, around Christmas time, we awoke one morning to see the ground covered with the most delightfully fluffy snow. Each twig on the trees had its own appointment in pure white frosting. It was a lovely sight, but while we were enjoying the Christmas scene, we saw a few birds frantically darting from branch to branch.

I have often scattered bread crumbs for the birds during a snowy winter, as I remember my mother doing so. Frankly, with the duties of a young family, I had never followed up my generosity towards our "feathered friends" to see if they partook of the bread. Now I had time to observe the birds feeding, for the children are growing up quickly it seems, and in a limited way I shall attempt to give the "confessions of a beginner at bird watching."

My next trip to the grocery store prompted a stop at the pet food section, and I brought home a mixture of seeds for wild birds and a package of sunflower seeds for the more selective birds. I tied pieces of suet around the railing on a carport deck, which we enter from our kitchen. Our summer deck now became the largest bird feeder in town—twenty four feet by twenty four feet. It was covered by four to six inches of snow over which I sprinkled generously my bird feed. I had hardly come into the house before I began to have delightful guests at my feast.

Somewhere along the years there came to our library a wildlife guide—some bonus book from a book club, I imagine—which we had never shown much interest in nor used in reference work. This book now took the place of the cookbook in the kitchen and I stirred my food preparations "by ear." as I held the wildlife bird charts close by in order to match each new guest with a picture in the book.

We found the snows frequent and lasting that winter; therefore some of the birds bent a few rules of their nature to come on the deck for food. It was indeed a strange sight to see a dove, which heretofore had been game for my husband and son, walking in its lumbering fashion two feet from our kitchen door. Often several doves came at the same time and scemed to command the respect of the other birds.

It became an incentive to hop out of bed each cold morning to see the many birds feeding side by side on the deck floor and railing. Even a red cockaded woodpecker could be seen eating the grain I had put out the night before as he hopped around an eastern towhee.

The mockingbirds and starlings enjoyed the suct more than any others except the black-capped chicadees. The chicadee is the most precious little bird, with its lustrous black cap, and seemingly the best socially adjusted, if there is such a state in the bird world. I always wanted to feel that little cap. So shiny and clearly defined, it seemed unique in every way. It appealed to more than just the sense of sight. I'm sure it felt slick and soft at the same touch.

Cardinals came in abundance. Is there a red to compare with the male cardinal? It was a cardinal, however, which

had a personality all his own, and an unpleasant one. I'm sorry to record. Fortunately he did not come for many days, but I presume he was getting old and crochety. I knew him from the others as his crest was not as prominent and he pecked at all other birds trying to feed. Other than this one bird, I will say each species followed its own pattern and I could not distinguish one individual from the others of its kind.

Sparrows have a marvelous appetite. Nothing could startle them. They stayed for dinner through all sorts of noises and disturbances. They reminded me of "the poor we have with us always."

Juncos, blue jays, and yellow-shafted flickers came to our table. The flicker often found it more fun to hammer on the metal gutters than to eat seeds.

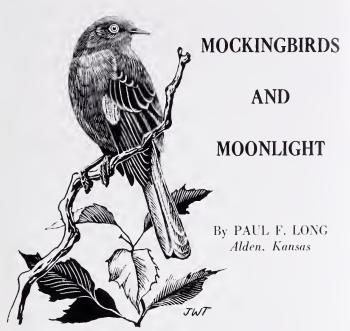
I must not forget to mention the day fifteen evening grosbeaks came, and fought each other for food in a land of plenty. Such gorgeous birds to have such poor manners; yet when you first see one, there is a "don't tread on me" look about the eyes and beak. Of course, all other birds seemed to find a reason to excuse themselves from the table while the evening grosbeaks dined.

I think one of the biggest thrills for a beginner came with a dart, a flitter and a quick departure. A tufted titmouse had joined the ranks briefly for a sunflower seed. They are such dainty birds, with a crest, a small chestnut streak on the flanks and white underparts. They are great friends of the chickadee, even though the span of their visits is much shorter. You have to be quick to get a glance at them.

It is spring now, and our birds are finding plenty to eat in the woods around my home. I still entice a few to visit my windowsill as I put some sunflower seeds in a box there. I am glad they can go back to the natural feed they love, and I try to watch for them in the trees even though the leaves now obscure the view at times. The robins are very accommodating as they seem to like the worms in my front yard. I sometimes count quite a few calmly feeding as they are not too easily frightened. Myrtle warblers and brown thrashers have been in our midst this spring. We hear them all about and hope they will not forget their winter bird feeder, as it has been a lot of fun for the whole family.

As a show of trust, we hope, we are expecting another generation of birds to be our guests. A mother blue jay very hurriedly put together a nest of scraps of paper and a lot other unsightly things in a tree six feet from our dining room window and the minimum of eight feet from the ground. She is so faithful to her charges and is so still and quiet as we move about the yard. Her nest is small and her brilliant color splashes out of it, so she is really an eye catcher. However, we are trusting no ill will befall her and we are anxiously awaiting the baby birds. They will be a treat we never expected to be able to watch so close at hand. Possibly a treat for us which says "thank you" for our winter care.

"The pleasure was all ours."



N a warm sultry spring night when the moon is bright and full, the air may he filled by liquid melody. Through yards dappled with shadows or flooded with white moonlight comes the golden song. Who is this nocturnal singer? It's "Colonel Mockingbird." the bard of the South, singing as though touched with moonlight madness.

Possibly the best known of the "mimic-thrushes." the mockingbird is found over a large share of the United States. South of the Mason-Dixon line this gray clad minstrel is most plentiful. Here he is found on telephone lines in magnolia or palm trees. As one drives along a southern highway snatches of song are heard, although the cheerful sounding songster may not be seen.

The song of this talented singer may be a long succession of notes and phrases of great variety. Some of this song is mimicking of other species; part of the song is peculiar to the mockingbird. In some parts of the country the mockingbird is much more versatile at mimicking other species than it is elsewhere.

The fact the mockingbird is the state bird of five southern states is indicative of his popularity in the South. The people of Arkansas, Florida, Mississippi, Tennessee, and Texas have chosen the mockingbird for their state bird.

When I think of the mockingbird, several vivid associations of the past are brought to mind. The gray pinioned singer was involved in each of these incidents.

My first recollection of the mockingbird goes back to childhood. On a warm Sunday morning in summer we children would sit out on the cellar door. Sitting there we would shine our shoes preparatory to the Sunday pilgrimage to church. From the top of a huge cottonwood tree out by the garage a mockingbird poured forth his song. Periodically he would rise upward into the air ten to fifteen feet, showing his conspicuous white wing patches, then settle back to his perch in characteristic mockingbird fashion. Undoubtedly we were very envious of him. He didn't have to give up two hours of his summer vacation.

While attending college my wife and I lived in an upstairs apartment in a small town near the college. This was hefore the days of air-conditioning, and the bedroom was almost unbearably hot in the evenings. One still hot early summer night as we tossed fitfully worrying about the next day's assignment we heard a joyous sound. Out of the moonlight night into our small apartment came the beautiful song. The liquid notes carried away our worry; forgotten was the drabness and heat of our tiny room.

Several summers ago we drove to Florida for a vacation. Our plan was to camp for the night at Silver Lake—about fifteen miles from Tallahassec—in the Florida National Forest. Our time schedule did not work out as planned, so it was after midnight before we arrived at the campground. To our dismay we found the gate closed making it impossible to get into the campground. Tired and discouraged from the long day's drive we drove back to Tallahassee to look for a motel. The heauty of the moonlit night was wasted on us in our irritability. As we stopped at a red traffic light by the State Capitol we heard a welcome sound; from a magnolia tree on the Capitol grounds came the golden song of the mockingbird as he sang to the moon. What might have been a very unpleasant memory of our trip, we now look back on as a highlight.

The story is told that the management of the Bok sanctuary in Florida once tried to improve the sanctuary by importing a number of nightingales from Europe. According to the story, the nightingales sang until June then ceased to sing as is their custom. However, by this time the local mockingbirds had picked up the songs of the visitors and sang in their best nightingale manner for the remainder of the summer. Such is the versatility of "Colonel Mocking-bird," the bard of the South.

LARK-LYRICAL AND FREE

The stars lay sleeping in the silent lake, And all the world was eloquent with night, When, from a nameless tree, I heard a bird Pour forth the rapture of its wild delight. The music soared, lark-lyrical and free To herald dawn, all luminous with gold. And I a part of that blessed company Who sees eternal mystery unfold.



JUNE, 1965

BUGS

over

By DUANE RAVER Cary, North Carolina

BASS



HERE'S something about popping-bug fishing for bass that absolutely defies description. It can be the most effective way to fill the stringer with nice-size bass, or the most frustrating, fruitless pastime since miniature golf. One bass fooled via the popping bug is usually worth half a dozen caught by any other method.

A warm, early summer day with scarcely a breath of breeze, lazy dragonflies dipping over the calm pond surface, and bass on the prowl: this is the ideal setting to go bugs over bass. If the water is clear, long or moderately long casts will be in order. This means a rod of some authority, say 81/2 or 9 feet long. The tip should be "fast" or moderately stiff. Team this stick with a fairly heavy line, preferably a weight forward or "torpedo head" type. Unless the rod is rated for something different, you will find that a GBF line should do the job.

A level "C" line is the next best thing to the weight forward type, and is much less expensive. A tapered leader is often a key to smooth casting with heavy bugs. The end of the leader fastened to the fly line should be quite heavy, say 15-pound test or better. A length of 8- or 10-pound test comes next, and a 20-inch tippet of 6-pound test finishes it off. A little more expensive is the "knotless" tapered leader which works even better.

If you're after real lunkers, a level 10-pound test leader may be best. Keep the kinks and extraneous knots out of the leader; this is the weakest link in your tackle. The manner of fastening the leader to the fly line is a personal thing and can be accomplished in two or three ways. Just make sure that it is a strong, smooth connection. It can be a semi-permanent bond, and one that is actually tied and will be on there for most of the season. The obvious disadvantage to this arrangement is the fact that changing leaders demands a new tie which may take several minutes.

In most fly fishing, the reel is only there to hold line, and as long as it does this reasonably well it matters little what kind it is. Not so, where powerful fish are likely to be encountered. The fly reel must be such that running fish can take line smoothly, without stops and starts or jerky action. An automatic reel simply can't do this. It's doubtful if you can strip line fast enough from an automatic to keep up with a four-pounder under a full head of steam.

Reprinted by permission from North Carolina Wildlife, June 1963.

A 60-foot run sounds a little improbable to those who have yet to latch on to a bragging-size "big mouth." but be prepared with some backing on the reel in addition to the fly line. Regular casting line, 10- or 12-pound test, is fine.

So far, our tackle for bass-bugging is fairly specialized. Not that it won't work successfully on panfish and even trout, but it is designed for tossing a bulky lure, the popping bug, a good ways. If this type of fishing is high on your list, a better job will be done with this matched gear.

In the realm of lures, the imagination of man is the only limitation. Some of the creations bear not the slightest resemblance to any living thing. Yet, if fished properly, most of them will fool bass—at times. One of the marks of a good bass popping bug (other than the fact that it catches fish) is its floating qualities. The body must be buoyant enough to hold the rest of the lure up, floating high for hours of fishing.

Another thing to look for is the "bite" of the hook, or that distance between the body of the bug and the point of the hook. Some beautiful bugs simply don't have the distance to make them successful hookers and thus strikes are missed and even hooked fish are sometimes lost. Make certain that the hook is sharp, real sharp!

If the bug has a lot of feathers on it, be a little leery of it. Most of the feathers are very soft and tend to waterlog easily thus pulling the lure down. Rubber legs may help the appearance from the fish's point of view, and at least aren't likely to detract from it.

Color? There are times when it seems vitally important, and other trips when it apparently makes no difference. A wise bass bugger goes armed with a variety of colors, particularly in yellows, blacks, whites, and combinations of these.

Up to now we've been assuming that the cork or plasticbodied bug is the only type available. While it perhaps is the most popular type, let's not forget the hair bug. This (Continued on page 20)



VIRGINIA WILDLIFE

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Commission Activities and Late Wildlife News... At A Glance

County of work and the Virginia grand of Camp of Game and strain of the Cocks of the From these piles, the Cocks of the From the Cocks of the From the Cocks of the Cocks of the From the Cocks of the Cocks of the From the Cocks of the Cocks o TIMBER SALES FROM GAME LANDS SUPPLEMENT MANAGEMENT. Timber sales from Game Commission lands for the first three quarters of the 1964-65 fiscal year have brought \$23,243 cash revenue to the Commission to supplement its management funds, according to Game Commission Forester J. W. Engle. Twenty-five percent of the income from timber sales is returned to the counties in which the Commission's Game Management areas are located.

- Sales included 541,300 board feet of sawtimber, 2,868 cords of pulpwood, 13,006 rails and 4,720 posts. Timber sales are carefully planned to derive maximum beneficial effects on wildlife habitat. Income-producing aspects are secondary but provide a significant source of funds for further game management on state lands.
- Sawtimber sales are primarily to break up stands of mature timber, encouraging browse production and improving species composition in favor of wildlife. Pulpwood sales serve this purpose, too, and also act as a weeding technique to improve growth and quality of the remaining trees. Timber and pulpwood sales have been used extensively in recent years to open up the edges of access roads at little or no expense. This "daylighting" helps keep the road dry, facilitates travel, reduces maintenance. and provides a cleared area for wildlife food production.
- Sales of posts and rails are primarily for weeding purposes to open up and improve the species composition of small stunted hardwood stands. Browse production from stump sprouting in these selectively cut areas is quite rapid and the beneficial effect continues for several years afterward.
- Under the Commission's current timber management program, sales are scattered rather widely over the areas on a compartment basis. These divergent operations tend to spread the vegetative changes over a wider area than would the harvesting of fewer large sections. Each tree to be removed is marked, allowing browse-producing species to be cut, causing sprout growth for deer and grouse food while mast trees are spared to mature and produce food for turkeys and squirrels. Cutting is based upon the amount of timber grown each year and the cutting cycle will be rotated on a sustained-yield basis.
- DEER STOCKED ON CLINCH MOUNTAIN. A total of 40 deer have been released on the Commission of Game and Inland Fisheries' Clinch Mountain Wildlife Management Area in southwest Virginia, according to Dr. Burd McGinnes, Leader of the Virginia Cooperative Wildlife Research Unit, who coordinated the project. The deer were trapped on Radford Arsenal property in Montgomery County and transported by truck to the release site.
- During the operation a total of 57 deer were caught, mostly by baited box traps. The tranquilizing drug tranimul was tried with poor success. Only 2 bucks were transported to the release area, the rest being marked and released on the Radford Arsenal grounds. Most of the 38 does that were released are assumed to be bred, so males will be added to the new herd with this spring's fawn crop.
- Deer on the arsenal property had become so numerous that they were damaging the range, and some thinning of the herd was needed to prevent disease and further deterioration. Limited bow hunting was tried, since security restrictions prohibit guns on the premises, but this was not effective in removing the required quantity of deer.
- This abundant source of deer and excellent trapping success were welcomed by Commission of Game and Inland Fisheries personnel in charge of the Clinch Mountain Area who have been scouring the state for such a source of deer since the area was purchased in 1961. It is possible that additional deer from Radford may be transported to the Commission's Hidden Valley Wildlife Management Area in Washington County, an area also in need of extensive restocking.

JUNE, 1965 13 HEN a coon hunter isn't hunting coons, there's a good chance he's at least thinking about it, planning it or talking about it. And a good, howling coon hound is just as eager for the sport as the hunter—maybe more so.

The trouble is, coon hunting is a fall and winter affair in many parts of Virginia. What to do in the spring and summer months?

Leave it to the coon hunters. They've found what to do. They put a caged coon on a cable-drawn raft and float him across a pond with hounds swimming in pursuit. It's called coon dog water racing, and it's the hottest thing going in coon dog field trialing.

Water races occasionally attract up to a thousand people and hundreds of hounds. Add one raccoon and you have one of the rowdiest and jolliest combinations anywhere.

The hounds, about half-a-dozen at a time, are placed in a starting chute at the edge of a farm pond. Out on the water, a few feet away, is Bre'r Coon safe and dry in a small wire cage riding atop an innertube raft. He never

Next Best Thing

By BILL COCHRAN Roanoke

comes in contact with the hounds, but the hounds don't know this.

Up comes the side of the chute and out dash the dogs, like Kentucky Derby horses breaking at the starting gate. They leap into the water with a foaming, white splash, hoping to devour the coon. But the coon moves away, across the pond, pulled comfortably and tauntingly with a winch on the other side.

The dogs swim in hot pursuit, with only their heads above the water, their long cars flapping as they go. Occasionally

Dogs dash out of the starting chute, while the coon watches from the safety of his cage.

Pack plunges into the water in pursuit of h





o 'Coon Hunting

they swim neck-to-neck the entire length of the pond. But usually one will lead and the others will follow closely in a vee-shaped formation like wild geese flying south for the winter. Some can't resist a bark or two which is often muffled by a mouthful of water. Some get too much water and turn back, much to the disgust of their owners.

A water race usually consists of a 300-foot swim. When the hounds reach the other side of the pond, the coon, cage, raft and all are drawn up into a tree denoting that the coon has "treed." Two winners are possible in each race, the "line dog" and the "tree dog." The line dog is the first to reach the shoreline; the tree dog is the first to bay at the treed coon. It's possible for one dog to win both, but it doesn't happen too often, or not as often as a coon dog

hunter would like for it to.

Modern water races shouldn't be confused with the old, now outlawed, "coon on a log" fights where the coon actually came into fighting contact with the hounds. Coon hunters organizing water races make certain that both the coon and the coon hounds are treated humanely. Fact is, the coon often acts as if he is enjoying the event. There is no question but what the dogs are having a howling good time.

The races usually last from about noon till dark. Once a heat is completed, the caged coon is placed in a small outboard boat and ferried back across the pond to the starting line for another event. Winners of each race compete in a grand finale where trophies are awarded the best hounds.

Water races often take on a carnival atmosphere. Hounds make music. Kids play. Women group together to chat. Hunters occasionally trade dogs; one coon hound was sold last year for \$5,000. And when hunters aren't swapping dogs, they are swapping yarns about their hounds and coon hunting; some are even true.

First to locate the coon and bark "treed" is declared

winner of the race





TICK FEVER

FIVE tick-borne diseases of man are known to be in existence in the United States: Rocky Mountain spotted fever, tularemia, relapsing fever, tick paralysis, and O-fever.

In recent years more human cases of Rocky Mountain spotted fever have been reported from Virginia than from any other state. Most of the cases have been reported from the Piedmont section; however, during the past 30 years at least one case has been reported from every county in the state.

It is known how humans acquire the disease and when promptly recognized and properly treated, recovery is usually complete. Inoculations are available which can be given before the tick season to induce immunity. However, there are many facts about how the disease is maintained in nature that have not been adequately studied.

Rocky Mountain spotted fever is caused by microscopic organisms called rickettsiae, which are smaller than bacteria and larger than viruses. It is transmitted to man through the bite of a tick. In humans the disease is characterized by sudden onset of fever, ordinarily persisting for two weeks, headache, inflammation of the mucous membranes of the eye, and a discolored rash. The rash appears on the extremities about the third day and spreads rapidly to most of the body, including palms and soles, before becoming effused blisters. Fatality is about 20%-25% in the eastern United States in the absence of treatment. However, since 1948 when antibiotics became available, death is uncommon.

Certain species of mammals, particularly rodents, have long been suspected of scrving as reservoirs of Rocky Mountain spotted fever because they are hosts of ticks. Also, antibodies against Rocky Mountain spotted fever have been demonstrated in the blood sera from some of these small mammals. Although the organism causing this disease has been recovered many times from patients and infected ticks, no strains of the spotted fever rickettsiae were reported isolated from a native wild mammal in the United States until 1954 when Gould and Meisse isolated a strain from a meadow mouse trapped in northern Virginia.

Four-Year Study

Because of the incidence of the disease in Virginia, it was felt that the state would be a good research site and in 1960 the Virginia State Health Department in collaboration with the Department of Rickettsial Diseases, Walter Reed Army Institute of Research, initiated a four-year study, under a National Institute of Health grant, entitled "Ecology of Rocky Mountain Spotted Fever."

An acceptable location for a study area was located on a farm at Montpelier in Hanover County.

Area Dragged

The study area selected was a 40-acre plot including various types of habitats varying from heavily wooded to open fields. The design called for dividing the 40-acre area into 400 plots, each 0.1 acre in size, and marked centrally by a metal stake. Radiating from the center of each 0.1-acre plot and selected at random were located two tick drag areas, 3 feet x 14 feet each. At certain intervals during the tick season, each plot was dragged with a 3 foot x 4 foot white

flannel flag in such a manner as to rub the flag against each plant in the drag area up to waist level. In one drag area the ticks collected were identified and sent to the Walter Reed laboratory to be tested for the presence of spotted fever. In the other drag areas ticks were collected, identified. nıarked. and replaced on the vegetation where captured. This was done for the purpose of estimating the tick population.

Mammals Trapped

At specific times, small mammal traps were baited and set by each central stake. Trapping was done so as to sample the entire 40-acre area within one or two days. The mammals were tagged, deticked, weighed, bled, and released at the point of capture.

The field study program has been underway since March, 1963, and is still in progress. The size of the study area recently has been expanded to 60 acres in order to facilitate the collection of adequate samples. Although this project is still in progress and much study of existing data still



Rodents are carriers of spotted fever, and ticks the vectors. By June 83% of the whitefooted mice in the study area were infected.

remains to be done, some results have been derived and may be described here.

Summary

It was estimated that the total adult tick population on the 40-acre study area reached 56,000 in June, 1963. Approximately 5% of all adult ticks tested were found to be infected with Rocky Mountain spotted fever; 4% of the nymphs and 1.6% of the larvae were also found to harbor spotted fever group rickettsiae. More recently, larvae collected in 1964 were found to have an infection rate of 2.7%.

Serological tests on blood specimens taken from white-footed mice trapped in the study area indicated that all animals were negative for Rocky Mountain spotted fever in March, but that 42% had converted to positive in April and a peak of 83% were infected by June. Other species in which evidence of infection was found were the meadow vole, the harvest mouse, and the short-tailed shrew, but much lower infection rates were found in these animals as compared to the white-footed mouse. Thus a large proportion of white-footed mice eventually serve as hosts for the disease organism.

The study has demonstrated that tick density is related

to certain types of vegetation, with the highest density in the low, woody, deciduous type; and that the greatest adult tick activity was on bright, sunny days and the least on cool, rainy, overcast days.

From a scientific standpoint, one of the contributions of the project has been the design and development of an ecological field study area, the principle of which can be applied to the study of other diseases in which wild animals are involved. Research workers from the United States and abroad have visited the study area to observe the techniques and procedures employed.

Throughout the study, all human cases have been investigated and the facts obtained shed some light on the occurrence of the disease in humans. Rocky Mountain spotted fever is popularly thought of as a rural disease of adult males. This investigation indicates that now it is more a disease of women and children in suburbia.

Although the National Institute of Health grant has terminated, limited studies are continuing through the cooperation of Walter Reed Army Institute of Research, Old Dominion College, and the Virginia State Health Department.

Individual Protection

The best individual protection from ticks is wearing adequate clothing and inspecting the body thoroughly once or twice daily when in tick-infested areas.

When venturing into tick-infested areas, wear high shoes, boots or leggings, tucking trousers tightly into boots.

Inspect naked body carefully on returning from a field trip and remove ticks. Pay particular attention to the armpits, neck nape, crotch and groin areas. In heavily infested tick areas, children should be inspected twice daily. If ticks do attach, they usually feed several hours before infecting man.

Hang up field clothing in the open after returning home. Ticks still on your clothes will walk off eventually.

Remove attached ticks with forceps, eyebrow tweezers, or a piece of paper or cotton held between the fingers. Do not use bare hands. A drop of alcohol, ether, gasoline, etc., may be used to force ticks to release their hold. Do not leave the tick head or mouth parts embedded in the skin. Ticks mashed hetween fingernails or onto the fingers can infect man

Be sure to paint the tick bite with an antiseptic such as iodine after removing the tick. Man can be infected through tick feces as well as the bites, so disinfection of bite and surrounding area is advisable.

Clothing (trousers, socks) can be dipped in or sprayed with several repellents, which are quite effective in warding off ticks. There are several chemicals on the market which may be readily purchased, such as indalone or dibutyl adipate.

If your work necessitates frequent travel into tick-infested areas, obtain the spotted fever vaccine several weeks before the tick season starts. To be effective, the vaccine must be given before spotted fever infection is acquired. Vaccination protects for one year only and must be repeated yearly just before the tick season starts.

If you become ill with fever, headache, and rash, be sure you inform your doctor of any tick bite you may have received. This will help him to diagnose your case and prescribe treatment.

From Virginia Health Bulletin, State Department of Health, Oct. 1964.

The Rappahannock Above Tidewater

By RANDY CARTER Warrenton

HERE comes a time to all of us when we have to fight for our lives in one way or another. Men defend themselves with guns or with medicine. Some wildlife defends itself with claws and teeth; still others resort to their camouflage or speed to get away. But a river has no defense against those who would destroy it hy a great dam. It can only hope that the friends it has made, those who have enjoyed its beauty, canoed its white water, fished its swift shallows and camped on its banks listening to the sound of its rapids before going to sleep, will come to its help.

The Rappahannock River is in danger of being flooded out by a great dam just above Fredericksburg. backing water thirty miles upstream to Remington. There are many who deem this great project necessary for flood control for Frederickshurg and as additional water supply for that town and vicinity, as well as recreational water for the area. Possibly all of the Fredericksburg community want a great dam in their own vicinity.

On the other hand there are many who say that this great dam is not necessary: that it will destroy the only river left on the east coast of the United States not already ruined by dams or city sewerage. It is the only beautiful, clean white-water river in a natural wilderness in Northern Virginia. Its Kelly's Ford Rapids are the most beautiful $1\frac{1}{2}$ miles of fast water in the entire northern part of the state. Few people know of the beauties of this river, this great wildlife refuge. Many of those who do know it think we should keep it as it is, for to flood it out is to destroy something that can never he replaced. Not everyone likes to fish from a boat; not everyone likes to run a noisy motor boat; many like to cast for fish in rapids churned white, canoe in these beautiful fast waters, and picnic beside the roaring music of the rapids.

Many say that smaller dams on the headwaters will solve the problems without destroying the river, providing upstream water storage, and flood control all along the river instead of for Fredericksburg only.

The town management estimates that a dam a fraction as high as the one proposed will give it all the water it needs. As for recreation, why more flat water at Fredericksburg which already sits on the tidewater of the lower Rappahannock, reaching to England, and is only fifteen miles from the mighty Potomac?

These are some of the pros and cons of this controversy about the death of a river whose beauty and fast water have been created by the ages, in the making for hundreds of millions of years.

Now let us take a look at this river, at its history and as it is today (as it may not be a few years hence).

The first we hear of this river is from Captain John Smith, who left the infant village of Jamestown to explore as far west as possible. He came to the island in the river at the foot of the falls just above Fredericksburg. Since boats could go no further, he stopped his explorations here, and depended on the Indians for details about the river

(Continued on the next page)

The Rappahannock Above Tidewater

(Continued from page 17)

further upstream. Their details were in general very good, for later explorers found them to be fairly accurate.

The first man to explore the Rappahannock above Tidewater at Fredericksburg was John Lederer, in 1670, He reached its very headwaters at Manassas Gap, and was the first white man to look down on the Shenandoah Valley. For the first time the beautiful land of Fauquier County was to know the hoof print of a horse.

After him came other explorers, In 1716 Governor Spottswood established an iron foundry near the river, and with it a colony of German settlers to operate the foundry.

Ten miles upstream from Fredericksburg, the river branches into two forks. To the south comes in the Rapidan. draining the southern part of the watershed, and from the west comes the river bearing the name the Indians gave it—Rappahannock—meaning, fast water.

The Rapidan was named by the Colonists for their Queen Anne. If she was no more rapid than the river named for her, she was a rather slow girl; for the Rapidan is not as fast flowing as the Rappahannock nor as beautiful, except in its high mountain sections where it tumbles off the Blue Ridge in endless and beautiful waterfalls.

Here at the confluence, the ancient canal may be seen running along its right-hand bank, held up by a great stone wall a mile long. On this, canal boats moved slowly from Fredericksburg to Waterloo, a distance of 55 miles. This canal represented a great effort by the town of Fredericksburg and the riverside communities to build a waterway to handle the produce of the Rappahannock watershed. Fredericksburg was the seaport for the world trade of this canal.

It is now hard to imagine the activity along this now abandoned river. Shut your eyes and dream a minute, and you will see a canal boat sixty-two feet long being poled along the canal by two husky Negroes. It enters a lock as it moves upstream, and the lock silently lifts it up to the higher level of the upstream section of the canal. Then a huge gate opens and it silently glides out of sight to the song of the Negro boatmen. Along its journey, it stops at great water-powered mills to unload lime or hardware, and the products of Fredericksburg's factories. At another place it stops at a farmer's landing to unload a new plow, and

Approach to a mile and a half long rapid near Kelly's Ford.



Miriam Carter canoeing along an old canal in the upper Kelly's Ford area.



further upstream it passes the mouth of a mine opening right on the canal: here on the return trip a shipment of gold may be waiting.

Life was centered about the river. Every few miles was a mill, and along its banks were prosperous farms, for the riverside was the highway long before the canal was built. There were a dozen fords across the river between Kelly's Ford and Fredericksburg. Now there is not one crossing in this thirty miles, and all is long gone and forgotten. The old mills are fallen down, the riverside roads are grown up in great trees, and the canal was abandoned shortly after the railroad cut across it at Remington. The railroad hauled wheat to Tidewater at Alexandria for eight cents a bushel, and the canal had to charge twelve cents to carry it to Tidewater at Fredericksburg.

The railroad hit the first and hardest blow to the canal, and the Civil War was the final blow. After the war the canal was abandoned, except for a few short sections used locally.

Following the Rappahannock upstream from the confluence with the Rapidan we come to the beautiful Snake Castle Rapids, where the river has an "out of this world" look with its great rounded boulders in its bed. its scattered islands, lovely trees, roaring rapids, all surrounded by wilderness on each side. This is an area that should be set aside for a Wilderness Park instead of flooding it with water.

For the next six or eight miles from Snake Castle, as one moves upstream, the river is nearly flat. Here the canal boats used the river itself, as a canal was not necessary. At the end of this flat stretch is the foot of the Kelly's Ford Rapids running upstream for a distance of one and one half miles.

The Kelly's Ford Rapids are the most beautiful parts of the entire Rappahannock River. There is nothing in all of Northern Virginia to compare with it. High above the river, held up by a massive stone wall, runs the old canal. As one stands on the old canal bank with the river thirty feet below, he gets a view of rare beauty: here the river, churned white and roaring, cascades over its rocky bed, tumbling over ledges and waterfalls. Here is a paradise for the fast-water fishermen—those men who like to fly fish and cast, and wade in the fast shallows. Here, too, is the paradise of the white water canoeist, for here is white-water sport unequaled anywhere else in all of Northern Virginia. Here too, beside the rapids, are deep swimming pools and sandy beaches, ideal for camping and enjoying the out-of-doors.

History speaks in this section of the river also. Here, within the sound of the river, fell the gallant young South-

ern Artillery Officer, Major Pelham, who fought through the Civil War to the time of his death without losing a single gun. Here, also, was fought the battle of Kelly's Ford and, a few miles south, the greatest cavalry battle of all time, the Battle of Brandy Station. Also along the rapids were located four mills, a wooden mill, a tannery, a furniture factory and store, and a shoe shop. All now have fallen into the past. Only the river remains as it was, wild and beautiful.

Many organizations are trying to save this beautiful Kelly's Ford Rapids section of the river for a park area so that this unusual type of fast water, with its dashing beauty, may be saved for our children and for posterity.

Anyone can make flat, monotonous water, but only God can give us the beautiful rapids we find at Kelly's Ford. Once gone, this rare type of river is gone forever.

Farther up the river are the remains of the famous old resort known as the White Sulphur Springs, once a very fashionable watering place, flourishing as late as 1901. On

The author navigates old canal locks on the Rappahannock near Deep



upstream above here, we come to Waterloo. Once this was a lively little village with five stores, a boat factory, two woolen mills, a warehouse for canal shipping, and several water powered mills. Now all there is left of this once prosperous riverside community is a single stone chimney standing in a field, lonely and gallantly saying to the world, if it cares to listen, "I am all that the Yankees left of the Waterloo woolen mills."

Here at Waterloo, near the headwaters of the old canal, fifteen miles from the Blue Ridge Mountains, we end our hurried trip up the Rappahannock. Perhaps some of us may come to know the river a little better, in time to extend it a helping hand and save the Snake Castle and Kelly's Ford areas of beautiful fast water for future generations to enjoy, lest they be flooded out forever by a great dam that is bigger and more destructive than it had to be.

Mr. Carter is the author of Canoeing White Water in Virginia and West Virginia, now in its fourth edition.

A rest on the rocks at scenic and historic Kelly's Ford.



BUT WHAT'S SO GREAT ABOUT CANOE PADDLING?

By BOB CARY Outdoor Editor, Chicago Daily News

HERE'S nothing wrong with canoe paddlers. I'm one myself. But I never felt that because I was sitting on a canoe seat I was a better sportsman or more appreciative of the wilderness than a guy sitting on a boat seat. And I never figured that because a guy wanted to take his wife and kids fishing in a boat instead of a canoe he was doing something wrong.

But that's how some people think. And those people have persuaded the Secretary of Argiculture that the only way for the U. S. Forest Service to "save the wilderness" is to throw everybody except the canoe paddler off the bulk of the public waters.

Now, because of the very nature of the Superior National Forest wilderness, 360 of the 400 lakes in the area are already canoe waters because you can't get to them any other way. . . . but a minority group of the paddlers wants all but a few pieces locked up from the boat fisherman or the guy who uses a side bracket and a small motor on his canoe.

To bring it up short, unless we get going, the single-use, paddle-only group are going to have the Superior National Forest wilderness for their own private playground. Since

the people up around Ely, Crane Lake and Grand Marais are being faced with closing resorts, closing lumber camps and the certainty of going broke, I thought maybe we ought to chip in and help them.

All they are seeking is that Freeman's order be held in abeyance for one year so it can be studied and so some adequate research can be done to actually determine what practices are good or harmful in the wilderness.

One thing is sure. The single-use group is well organized. They've flooded the country with propaganda and even have some of the sportsmen's groups conned.

If you want to see what a real fine job they are doing on us, drop a note to George James, Region 9 Forester. U. S. Forest Service, Milwaukee, Wisconsin, and ask for the Boundary Waters Canoe Area Review Committee report and also Secretary Freeman's report and directive to the U. S. Forest Service. Don't pay any attention to the publicity puffs from the Forest Service office. They can't take any other position and keep on working.

If this program goes through, we will go fast from multiple use to single use on federal areas and we may in the future find the government zoning off the public waterfowl areas for the benefit of butterfly collectors and the federal lakes for students studying snail culture. variety is usually tied with a buoyant hair, like deer body hair or caribou, and is clipped short to provide good floating qualities. Buck tail is often added to simulate legs or a tail. This can be a deadly bass bug.

One of its big disadvantages is its relatively poor floating ability. It may waterlog before its cork cousins. A touch of a good dry-fly solution helps keep them up longer. This little annoyance of having the bug sink shouldn't discourage you from using it.

All the merits and faults of the lures go out the window when the method of fishing comes in. In other words, a poor bug will catch fish in expert hands, while the best popper in the world may be a flop when improperly fished. Just how then, do you use them?

Let's take an average farm pond where there are a few wisps of vegetation around the upper end. The water here may be from a few inches to several feet deep, but at least it is the shallow end. Ten minutes' quiet observation of the area (if the water is clear, and if it is not, hope for the best) will undoubtedly pay off. Even if you are familiar with the water, look it over. Check on cruising bass, aquatic insects, feeding fish, etc.

The type of food may give you a clue to the size or type of lure to use. If you're not sure, it might be best to start with a smaller bug and work up. Tie on a number 4 yellow popper, straighten the leader by pulling it through a small square of rubber or even a pencil eraser, and cast

One bass taken on a popping bug is worth half a dozen caught by any other method.





Strike! There's something about popping-bug fishing for bass on a warm, still, early summer day that absolutely defies description.

gently right up to the very edge of the pond. If you are wading (which is actually the best way to approach bugging), cast ahead of you, working every bit of the water.

The line should float at all times. If it doesn't, dry it off and re-treat with a good line dressing. This holds true even for the "floating lines that need no dressing."

For the first dozen or so casts, allow the bug to remain quiet for a few seconds. Let's hope that something swats it before you have a chance to move it. If not, twitch it ever so gently then stop. Fish the lure for at least half the length of the cast rather than only a few feet. Most of your strikes will probably come within 4 feet of where the bug lights, but don't count on it. Some nice fish are missed by hurrying the retrieve to get to the next cast. The byword in bugging is "slow."

If this "take it easy" approach doesn't seem to arouse the interest of the bass, branch out to a little more noise. The average popping bug can create quite a fuss when you bear down. Still allow a few seconds between pops.

Once the bass has taken the bug, set the hook with a rather sharp upswing of the rod. There may be such a thing as setting the hook too soon, but unless you actually pull the bug out of the fish's mouth, better sink the hook as quickly as possible.

If a bass strikes and misses, and he has not felt the hook, a couple more quick casts should be fired into the same spot. If the point nicked him, let the place rest for an hour. If a bass breaks off, this location is good for another try next time.

Some of the mountain reservoirs (Nantahala is a good example) are crystal clear and call for lots of distance between the fisherman and the fish. This is boat fishing for the most part, and stealth is important. Wear dark clothing (this is a good idea anywhere) and keep low. Toss the back cast high and apply a gentle surge of power on the forward cast. The smaller poppers cast best at great distances.

Late afternoon or gray dawn may help hide you when fishing these clear waters. As summer progresses, these times are best for any waters.

The best rule to remember in bass fishing is that there are really no rules.

What's New on the Shore

(Continued from page 9)

The rooms are large with high ceilings, cool in summer and well heated during the cold winter hunting weather. You will even find a color TV set in the main lounge.

All the sportsmen whom I have referred to Cedar Island returned two or three times again the same season, which speaks well for the food and management of the club. Their only complaint was "There is too much good food to eat!"

Here are some suggestions for sportsmen planning a trip to Cedar Island. First call Johna Davis at SUnset 7-1010 for reservations; limit is about 30 persons. Take your own outboard motor. I like a 9½ h.p. Evinrude Sportwin for fast trips on the inland waterways—power enough to be safe going to sea through the inlets, and economical to run all day on one six-gallon tank of fuel.

Don't try going to sea through the inlets with a small 2 or 3 horsepower motor. The 5- or 6-knot tide might allow you to get outside, but small motors can't do much against such a swift current on the return trip. Even on a calm day, such inlets can be dangerous for inexperienced boat operators; hire a local guide.

If you plan to fish in the surf, it pays first to cruise along the beach at low water and locate the best sloughs or "slews" where fish can find deep water and food close to the beach. Before fishing I usually erect markers above the high water mark, so I can find my fishing holes night or day while driving along in the club's jeeps. Fishing is usually best from sundown to dawn, because large fish swim closer to the beach at night.

I like a Hatteras Heaver rod for surf casting—plenty long, and with guts enough to toss a large bait and 4- or 5-ounce pyramid sinker. A conventional surf reel or spinning reel holding 200 to 300 yards of line or monofilament testing 30 to 50 pounds is about right for the channel bass that usually weigh over 30 pounds. Often at night large and heavy sharks weighing 100 or more pounds will take your bait, and you will lose a lot of line if yours does not test at least 30 pounds.

It is advisable that you attach about 14 feet of shock leader to the end of your surf fishing line to prevent sand chafing, etc. I.G.F.A. does not recognize record fish catches where the leader exceeds 15 feet.

I usually rig a "fish finder" for surf fishing, attach a 3-foot leader testing 50-60 pounds to a needle-sharp Eagle Claw 8/0 or 9/0 hook for channel bass. I find the head half of a fresh Norfolk spot or a mullet is the longest lasting bait, when crabs are abundant in the surf, and the drum are running.

For panfish in the surf, I like bloodworms or peeler crab baits on very small hooks. Bloodworms are a top lure for small-mouthed kingfish—a delicious table fish.

Fishing action in the surf can be fast or slow. When things are slow it pays to have a sand spike to hold your rod, and a folding stool for comfortable sitting. Carry a gaff, flashlight, knife, and an old towel for your hands after baiting hooks, etc. An old wicker market basket can be useful for toting bait, extra tackle, water jug or even your catch up and down the beach. But always keep it just above the high watermark, or it might be carried away by a wave you did not notice when the fish were biting.

Ultra-light spinning tackle is tops for sport when the spring run of shad starts at Cedar Island. I like a 2-ounce rod and 4-pound test monofilament line (Stren is best).

A Nungesser shad-rig comes with a small 00-size spoon attached to the end of a ready-tie leader with a small dart above to give the necessary weight for long casts. Often this rig will take two fish at a time. The action of the spoon on this rig gives action to the dart lure while retrieving.

When the tide is swift, it may be necessary to add a bit of lead just above where you fasten the shad-rig to your line. Shad usually bite best at a certain depth and it pays to keep your lures at this depth to assure success. Try various weights of sinkers until you find the right combo.

For flounder fishing, a strong, light-weight spinning outfit is standard tackle. I like a spreader with two snelled hooks, weighted in the middle, for drift or bottom fishing. I bait the hooks with live bull minnows or pennant-shaped strips of squid, or both.

For flounder trolling a small tony spoon with the hook tipped with one or two frozen silversides minnows is a hot combo for catching 1- to 8-pound fluke that abound in the waterways and inlets around Cedar Island. Troll very, very slowly for flounders, and be sure your line tests enough to handle these powerful fish, which may hit two at a time. Beware the sharp teeth of your flounders, when you land them, and always use a landing net.

It is also possible to catch a wide variety of other fish around Cedar Island and its waterways. There are spot, hardheads or croakers, trout, grunts, pigfish, and many other kinds of finny gamesters, including tarpon as large as six-feet long, that can be seen in the summer months feeding along the waterways. Few seem to have the know-how for taking these large tarpon that visit this area each year.

If you plan to try some do-it-yourself marsh hen hunting next fall at Cedar Island, be sure to take a pair of full-length waders to walk-up your birds on top of the marshes at high water. I found this to be great sport. I usually shoot No. $7\frac{1}{2}$ shot.

For duck hunting, all you need is hip boots to retrieve your birds from the shallow water around the pond blinds. It is rare to have to wade over knee deep. Take No. 4 shells for the brant and black duck shooting. A good duck call is useful *if* you know how to use it, but don't blow it if you don't know how. It might ruin your hunting.

On your way to or from Cedar Island it will pay you to take the new Chesapeake Bay Bridge Tunnel and visit the Sea Gull Fishing Pier, located on the South Island of the Thimble Shoals Channel Tunnel some tour miles out from shore. This 625-foot public fishing pier offers good deep sea sport with no fear of seasickness.

The pier has free 18-hour parking, a tackle-bait shop, and restaurant. Fee is \$1 a day to fish, and you can catch channel bass, black drum, flounder, spot, bluefish, croakers, whiting, rock, trout or weakfish in season. The pier is lighted, has seats, fish cleaning table, and gear for raising or landing your fish safely. Water around the pier ranges from 50 to more than 100 feet deep. The bottom is all hard.

Anglers on the pier can watch large ocean vessels steam by within a few hundred yards. All this and fishing too.

The Virginia Eastern Shore will certainly grow and prosper now that it is so easily accessible by car to north and south. But somehow, I hope those outer islands will never see the bright lights and the crowds that go with such blandishments of living. I guess I am just a country boy at heart.

Trail Blazing

(Continued from page 4)

A memorable lesson in forestry is given at one stop by the sawed-off remains of a giant oak. The typical rings, indicating the tree's age. are clearly defined for the onlooker. It can be pointed out that when the rings are close together the tree grew slowly because of drought or because it was crowded by other trees.

At still another point the tragic tale of the chestnut blight that once destroyed these native trees is evident in the bleached skeletons of once-valuable chestnuts. Scattered sprout growths of young trees taking hold in their midst offer little hope, for eventually the disease will again attack and destroy.



A lesson in forestry at station 34 on the Tomahawk Trail.



The beautiful woodland terrain where the pathway leads.

Then there are the two lakes to add to the beginner's knowledge of aquatic and marine life as man has aided and rearranged nature to suit his purposes. One lake is devoted to fishing only, while the other is open additionally for swimming and boating. The ecological problems of a typical aquatic area can be studied here. However, the lakes are their own excuse for being. They are there for the recreational enjoyment they provide and for quiet beauty that is so important a part of nature's bequest.

One unique and startling feature of Tomahawk Trail emphasizes the importance of anti-litterbugging. Near the end of the hike, a great heap of debris, centered in a clump of trees, brings the spectator to an abrupt stop. There is instant disillusionment and disgust! Who would inject a note of human disorder and carelessness into a forest haven where all had been beauty and serenity?

The contrast is intentional. It is an object lesson in the national campaign for better outdoor housekeeping by all citizens of all ages. The accumulation of trash had been collected from the park area. It was now used to point up the inexcusable eyesores on the landscape that people create by conscious and unconscious littering.



An intentional sour note is this object lesson in good outdoor housekeeping.

The importance of developing an anti-litter conscience in the young was brought home to me one morning when I accompanied a small group of students who were walking the trail for the first time. Most of the young faces wore a look of respect, approaching awe, when they referred to their self-guide booklets, then carefully studied the specimens of nature first-hand.

When we arrived at the aforementioned stopping place, I watched their faces. Dismay and unbelief replaced the eagerness and interest.

"But what's that awful mess doing here?" one girl asked indignantly. "It's so ugly!"

"You're right, it is." I answered. "You'll see much of the same along many public highways and byways. Haven't you noticed?"

"We've noticed all right," a boy spoke up. "It's a shame that people ugly up so much prettiness!"

It is indeed. It is also a shame that such limited emphasis is put upon the importance of modern-day conservation. Perhaps our greatest hope lies with the youth we should seek to educate; perhaps they will then take up the banner that we often have failed to keep flying.

Robert Scott. the British explorer, famed for his explorations in the Antarctic. once wrote these words to his wife: "Make the boy interested in natural history if you can; it is better than games: they encourage it at some schools."

Many methods of creating interest have been tried. The educational divisions of various state and federal agencies have introduced movies, slides, lectures, demonstrations, and youth contests. On a larger scale, the principles of conservation are occasionally heralded on television, radio, newspapers and other publications. However, teaching direct from nature is possibly one of the most painless and effective ways to make a lasting impression.

At best, the exposure of the young to the fundamental sciences of plant and animal life should arouse appreciation, respect and knowledge that will alter and improve conservation practices. Nature trails are not uncommon; yet they are far too few. Perhaps there is no more worthy project for League Chapters, Boy Scout troops, conservation groups, state and national parks throughout the country.

It is not necessary to establish paths in a grandiose manner, with large expenditures of labor and money. Tomahawk Trail cost the Lynchburg Izaak Walton League less than one thousand dollars. It was developed after obtaining ideas and materials from many individuals representing numerous land-use agencies and conservation organizations. Local





Two man-made lakes and a game bird food planting illustrate how man may aid and rearrange nature to suit his own purposes.

youth groups. Boy Scout troops from Lynchburg, and the F.F.A. Chapter from Amherst assisted League members in various phases of the trail development.

The undertaking can be carried out by a hard-working few with knowledge and ideas, or it may be accomplished by larger cooperating groups, working together at specified intervals, with financial help from others not actively participating. There is no limit to what can be done; yet simplicity can be a keynote for those who recognize limitations. The idea is to begin—not next year, but NOW!

John Burroughs in his Gospel of Nature once wrote, "Nature teaches more than she preaches. There are no sermons in stones. It is easier to get a spark out of a stone than a moral."

There remains in each of us a trace of the natural man, a kinship with the Infinite that may be felt rarely. but quietly awaits the opportunity for awakening and growth. As recreational hours multiply for the average individual, so should his efforts to seek restoration. For many there is no peace or relaxation in the city streets or meager back yards in the suburbs. There is a deep need for self-communion in the larger sphere of creation where the orderliness of life is evident and the quiet is tuned to a slow tempo that brings physical and mental renewal for those who seek escape from their everyday world.

Native Indians may have established the first nature trails in America, but let us not belie our birthright. Let us, too, blaze new trails through the unspoiled woodlands, leaving evidence to future generations of our concern for our natural heritage and appreciation of its importance in our lives.

Rustic display panels augment that which nature provides, and at trail's end a sign summarizes the lesson.









Edited by HARRY GILLAM

Recreation Sticker Use Clarified

Recent word from the George Washington National Forest spells out a bit more clearly just what advantages Virginians may expect from purchase of the \$7 annual federal Recreation Sticker. Authorized by the Land and Water Conservation Fund Act, the sticker will admit the vehicle to which it is attached to federally owned recreation areas such as those found on National Forests, National Parks, Corps of Engineers projects and others.

On the George Washington National Forest these designated recreational areas turn out to be those constructed by the Forest Service and mostly operated on a free basis up to now. The man with a sticker will be exempted from paying a 25ϕ per person entry fee at these areas. The sticker will not admit persons to "concessionaire" operated facilities, such as Sherando Lake, but these may be brought under the program at a later date. Extra charges may be assessed in addition to the entry fee at some superior areas such as highly improved eampsites and mechanical boat launching fa-

The newly established fees went into effect June 1. A list of these areas for the George Washington National Forest is available from Forest Headquarters in Harrisonburg. It is assumed that similar lists are available from other agencies where such facilities are found. The \$7 season sticker is to be for sale at all places where these fees are charged.



Wilfred Moss of Richmond proudly shows off a 9 lb. 6 oz. largemouth he landed from a private pond in Essex County on a 6 pound monofilament line.

Dove Numbers Up in East

Dove-breeding populations were up 7.4% in the Eastern Dove Management Unit, which includes Virginia, during 1964, according to the U.S. Fish and Wildlife Service Mourning Dove Status Report. In Virginia the number of doves heard on census routes was up about 15% over 1963 observations.

The number of breeding doves is estimated by a system of call-count census routes. The number of cooing doves heard is compared with data from the same routes during the previous year to determine relative breeding numbers. These counts are made during late May and early June. Results of the 1965 survey now in progress will be tabulated and used as one of the bases for establishing the fall hunting framework for this species.

Double Score



Gerard Durand of Norfolk managed to land both of these citation-size specimens from Lake Burnt Mills. The largemouth weighed 8 pounds 5 ounces and the pickerel 4 pounds 11 ounces. They were taken on two separate fishing trips about 2 weeks apart.

Over 1,000 Pheasants Released In State

This spring over 1,000 pheasants of various experimental strains have been released in Virginia as part of the Game Commission's continuing effort to establish these attractive game birds in the state, according to Dennis Hart, Supervisor of the Foreign Game Bird Introduction program. Approximately 100-150 birds were released at each site in 13 Virginia counties. Some of these releases were in areas previously stocked and others were in new locations.

About 150 pure western Franian blacknecks were released in Brunswick, Isle of Wight and Surry Counties, Blackneckringneck hybrids which, to date, have shown encouraging prospects, were released in Chesterfield, Hanover, Prince George, Charlotte and Middlesex Coun-

Japanese green pheasants, which have done well in Virginia coastal lowlands, were released at sites in Floyd, Northampton and Fauguier Counties. About 300 kalij pheasants, grouse-like birds considered best suited to mountainous habitat, are scheduled for release in Henry and Carroll Counties. Campbell and Halifax Counties have received releases of 550 black francolin partridges. a bird similar to but larger than our native bobwhite.

It is important that these birds receive adequate protection from careless or wanton shooting by persons afield this spring and summer. These colorful and active birds in their spring breeding plumage may present tempting targets to varmint hunters and plinkers at this time of year. By passing up this temptation, hunters will be greatly increasing their chances of some day being able to hunt these unusual birds during regular seasons. Even though shooting these birds is strictly illegal, fines cannot offset the irreparable damage that can be done by poaching during this critical



THE TOP

Friday. April 30th, was the day—Award's Day—for the winners of the 18th Annual Wildlife Essay Contest. Mary Sue Scott, senior at Bland High School, was presented an engraved bronze plaque by Wesley Haden, president of the game wardens' association for having written the most outstanding essay on "What Can I Learn About Conservation Through Outdoor Recreation?"

Miss Scott was congratulated by Governor Albertis S. Harrison. Jr., as he presented her with an \$800 scholarship award to be used at a college of her choice.

The grand prize winners of \$50 each. of the eligible grades, fifth through



18th ANNUAL WILDLIFE ESSAY CONTEST



Warden Haden and scholarship winner Mary Sue Scott.

twelfth, were as follows (top to bottom from left):

Senior Grade: Jean Handy, Clarke County High School

11th Grade: Marjorie Scott, Liberty High School, Bedford County

10th Grade: Fred Gouldin, Rappahannock High School, Richmond County 9th Grade: Carol Carr, Clarke County

High School 8th Grade: Rice W. Levi, III. Clarke

County High School 7th Grade: Vivian White, Middletown

School. Frederick County
6th Grade: Linda Munsey, Bland Elementary School

5th Grade: Robert Shearer Ramsburg, Berryville Elementary School, Clarke County

These student's essays were selected from approximately 15,700 submitted from 190 Virginia schools. Two hundred thirty-three prizes totaled \$3,000. Other individual prizes included a \$25 second place, three \$15 and three \$10 awards for each eligible grade; and 136 \$5 awards which were divided in proportion to grade participation.

Watch for the September announcement of the 19th Annual Wildlife Essay Contest and ask your teacher to enter your school. You, too, may be a winner! The State Board of Education has actively cooperated in this conservation project, and includes the contest each year on its list of recommended contests.

WINNERS

The winners and their parents were guests for the day of the Virginia Division, Izaak Walton League of America and the Virginia Commission of Game and Inland Fisheries, who for the past 18 years have jointly cooperated in the promotion of the annual essay contest in the schools of Virginia. Before the presentation ceremonies they were given a tour of the State Capitol. After receiving their awards from the Governor, a bus tour took them to historic sites in Richmond. They were luncheon guests of the Richmond IWLA Chapter at their park near Midlothian where trap-shooting and archery demonstrations were enjoyed.

(Schools participating 100% will be listed in July issue.)





Edited by JIM KERRICK

What You Must Do In Case of an Accident

The term "hoating accident" includes collision or other mishap involving a boat and resulting in any injury, loss of life, property damage, capsizing, foundering, flooding, fire, explosion, or disappearance of a vessel other than by theft.

The operator of a pleasure craft involved in a boating accident on the waters of Virginia must stop and render any assistance possible without seriously endangering either his vessel or persons on hoard. The operator must identify himself and his boat to any person injured and to the owner of any property damaged.

Written accident reports must be submitted to the Virginia Commission of Game and Inland Fisheries by the operator(s) whenever there is loss of life, injury causing any person to remain incapacitated for more than 72 hours, or damage to property in excess of \$100.00. When in doubt, file a report. Written reports must be filed within ten days where there is property damage or personal injury. In the case of death a report must be filed or submitted immediately.

Should the operator be injured or unable to submit a report, assistance may be obtained from the local Game Warden or any law enforcement agency.

Virginia Boating Accident Report forms may be obtained from the Commission office in Richmond, from any Game Warden or local marina.

Hot Water—No Problem for Outboarders

Hot water is no problem to the outboarder. Just start the engine and in a few minutes hot water will be discharged from the water pump at the hack of the motor, says the Johnson Motors News Bureau.

SPECIAL NOTICE

Any person taking possession of, making fast to, defacing, moving, injuring, obstructing, or in any manner impairing the usefulness of any aid to navigation established and maintained by or under the authority of the U. S. Coast Guard is subject to punishment by federal law.

Tips for Trailer Tire Care

Many pleasure boaters who trailer their rig to and from the water take admirable care of their outboard motor and boat all year round, but they never glance at their trailer tires.

First, you must make sure that your trailer tires carry the correct amount of air while carrying a hoat, and, by the way, don't ask a service station attendant for the correct tire pressure as trailer tires normally carry more air than automobile tires. Check your trailer manufacturer's recommendations.

Failure to inflate your tires correctly may result in hlowouts, or cause your trailer to sway dangerously.

The right tire on your boat trailer receives more punishment than the left tire. On crowned roads the weight on the trailer leans to the right, the right wheel is off and on the hard surface hitting pot holes and broken pavement. You should switch your trailer tires often to equalize wear.

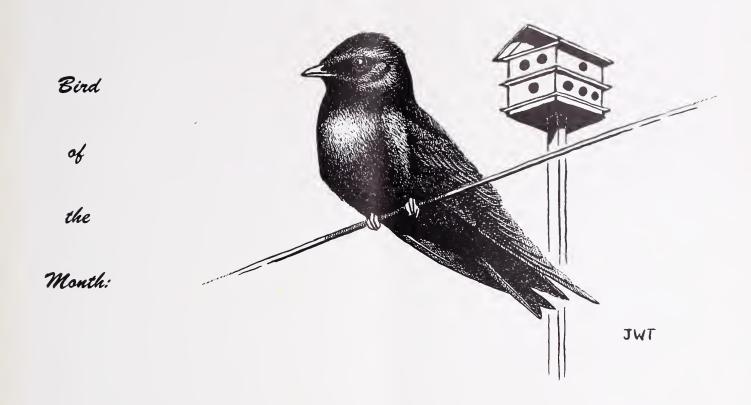
A great many trailers are not used for braking and the tread does not wear as fast as that of an automobile tire, hut the sidewalls are subject to much stress and strain. Check them often and, if need be, replace the tires.

Keep your automobile tires properly inflated. Heavily loaded trailers have been known to sway due to the rear automobile tires being under-inflated.

The cost of an extra spare wheel and tire for your trailer is nil compared with the unpleasant moments when you are on the highway and have a flat tire.

One last and very important point. Don't forget to check your wheel bearings. Be sure they are properly packed and greased.





Purple Martin

By DOCTOR J. J. MURRAY Lexington

THIS is a request number. Several people have asked that one of these Bird-of-the-Month pages be devoted to this popular and beneficial bird. Many, too, are concerned about this bird's situation today. While the purple martin is still reasonably common in Tidewater, it is scarcer the farther one goes inland.

Around Richmond, where it was formerly abundant, it is now reported as rather uncommon. In the upper Piedmont it is much less common than formerly, while it has entirely disappeared from many of its former haunts in the Valley. It is rarely now seen in Rockbridge even in migration time. Milam B. Cater of Madison Heights has for years been gathering information on this bird in Virginia. His conclusion is that east of Route 1 it is fairly common, and that in a few cities in the Valley—Winchester, Harrisonburg. Staunton, Clifton Forge—it is still fairly common, but that many counties in Southwest Virginia have no martins at all. He does conclude that the birds are on the increase of late.

The purple martin is the largest of the six kinds of swallows that come to Virginia. (It should be remembered that the bird called the "chimney swallow" by many people is not a swallow at all, but a swift.) The tail of this bird is forked, but not nearly so deeply as the tail of the barn

swallow. The male is a glossy steel-blue all over, the only swallow so dark underneath. The female is duller on the back and pale gray underneath. Like all swallows they are skillful flyers, taking their food on the wing. Their note is a rich warble, *cherroo*, *cheroo*.

This bird is, on the whole, beneficial in its food habits. While it does capture some useful dragonflies, it eats quantities of mosquitoes and insects harmful to our crops.

The purple martin nests in a hole, sometimes in a natural cavity, but now much more commonly in cavities about buildings or in a nest box prepared for it. For years in Lexington we had a small colony in the main business block of the town, in the boxing under the eaves of a store building. When the boxing was repaired we had no more martins.

They are colonial nesters, often filling every section of a multiple bird house or every gourd in a group hung on crossbars or poles. Such groups of gourds are often used farther south. In these gourds a nest is made of grasses and feathers, with sometimes a base of mud. Four or five long white eggs are laid. When the young are hatched they are fed quantities of small insects.

With their attractive, darting flight and their bright, chirruping notes, purple martins add a nice touch to any farmyard.

